7. (New) The method of Claim 6, wherein said alpha-crystallin type protein is selected from the group consisting of p26, SicA, and alpha-A-crystallin.

8. (New) The method of Claim 6, wherein said fusion protein comprises said alpha-crystallin type protein or a fragment thereof comprising an active domain, said insoluble protein, and a proteolytic cleavage site, said cleavage site positioned between said alpha-crystallin type protein or a fragment thereof comprising an active domain and said insoluble protein.

9. (New) A method of increasing the solubility of a first protein, said method comprising expressing said first protein as fusion protein with a second protein consisting essentially of an alpha-crystallin type protein or a fragment thereof comprising an active domain.

10. (New) The method of Claim 9, wherein said alpha-crystallin type protein is selected from the group consisting of p26, SicA, and alpha-A-crystallin.

11. (New) The method of Claim 9, wherein said fusion protein comprises said alpha-crystallin type protein or a fragment thereof comprising an active domain, said first protein, and a proteolytic cleavage site, said cleavage site positioned between said alpha-crystallin type protein or a fragment thereof comprising an active domain and said first protein.

12. (New) A method of increasing the stability of a first protein, said method comprising:

a) expressing said first protein as a fusion protein with a second protein consisting essentially of an alpha-A-crystallin protein in bacteria;

b) purifying said fusion protein; and

c) removing said alpha-crystallin type protein or fragment thereof from said purified fusion protein,

thereby resulting in said first protein.

13. (New) The method of Claim 12, wherein said fusion protein comprises said alpha-A-crystallin protein, said first protein, and a proteolytic cleavage site, said cleavage site positioned between said alpha-A-crystallin protein and said first protein.

14. (New) A method for purifying native bovine alpha-crystallin protein, said method comprising the steps of:

a) contacting a protein fraction comprising an alpha-crystallin protein with a glycine solution having a pH of approximately 2.5;

b) size filtering the fraction of step a);

c) neutralizing the fraction containing the alpha-crystallin protein; and

d) buffering the alpha-crystallin protein to a pH of approximately 8.

15. (New) A method for protecting a protein from proteolysis during purification, said method comprising applying a sample comprising said protein to a chromatographic pre-column filter, said filter comprising bovine alpha-crystallin protein, coupled to a chromatography resin.

REMARKS

Amendments to the Specification, Claims, and Abstract

Applicant has amended the specification, claims, and Abstract to overcome the Examiner's objections to the specification and claims, as well as the rejections under 35 U.S.C. § 112, second paragraph. The specification has been amended to provide abbreviations with their full names and to correct typographical errors. Support for new Claims 6 through 11 is found throughout the application, for example, at page 2, line 24 through page 4, line 4, and page 5, lines 13 through 26. Support for new Claims 12 and 13 is found throughout the application, for example, at page 2, line 24 through page 4, line 4 and at page 5, line 27 through page 6, line 2. Support for new Claim 14 is found throughout the application, for example, at page 10, line 13 to page 11, line 2. Support for new Claim 15 is found throughout the application, for example, at